

WHAT IS CLAIMED IS:

1. A microscope comprising:
 - a basic body which at least one microscope objective and at least one eyepiece,
 - a beam path defined by the microscope objective and the eyepiece,
 - at least one beam splitter being provided in the beam path between the microscope objective and the eyepiece, wherein the beam splitter reflects a portion of the light out of the beam path to the eyepiece or reflects images into the beam path going to the eyepiece,
 - a carrier on which the beam splitter is mounted, and
 - a recess in the basic body into which the carrier together with the beam splitter insertable and removable.
2. The microscope as defined in Claim 1, wherein the carrier is fitted into the recess in such a way that after insertion, the beam splitter is aligned relative to the beam path without the need for further alignment.
3. The microscope as defined in Claim 1, wherein the carrier comprises on its end facing away from the beam splitter a coupling onto which various microscope accessories can be mounted.
4. The microscope as defined in Claim 3, wherein the carrier is insertable into the recess of the microscope rotated 180 degrees about an axis perpendicular to the beam path, so that the beam splitter are used for reflecting in and reflecting out.
5. The microscope as defined in Claim 1, wherein the microscope is a surgical microscope.

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6. The microscope as defined in Claim 1, wherein when no beam splitter is inserted into the beam path of the microscope, there is inserted into the respective recess a plane-parallel plate, held on a carrier, whose optical path length corresponds to that of the beam splitter.
7. The microscope as defined in Claim 1, wherein the beam splitter has a optical property of being intensity-specific, wavelength-specific or polarization state-specific.
8. The microscope as defined in Claim 7, wherein the beam splitter is configured as a splitter prisms.
9. The microscope as defined in Claim 1, wherein at least one further optical components is mounted on the carrier and the further optical components comprise filters and compensation elements.
10. The microscope as defined in Claim 1, wherein the carrier comprise a coding that transmits to a control unit information about the microscope accessory optically connected to the beam path.
11. The microscope as defined in Claim 10, wherein the control unit performs an adaptation of the microscope on the basis of the coding.
12. A stereo microscope comprising:
 - a basic body which at least one microscope objective and at least one binocular eyepiece,
 - a first beam path and a second beam path defined by the microscope objective and the eyepiece,
 - a beam splitter being provided in each the beam path between the microscope objective and the eyepiece, wherein the beam splitters reflect a

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portion of the light out of the beam path to the eyepiece or reflects images into the beam path going to the eyepiece,

- a carrier on which the beam splitter is mounted, and
 - a first and second recess in the basic body which releasably take up the carrier together with the beam splitter in the first and the second beam path.
13. The stereo microscope as defined in Claim 12, wherein the carrier is fitted into the first and second recess in such a way that after insertion, the beam splitter is aligned relative to the first or second beam path without the need for further alignment.
 14. The stereo microscope as defined in Claim 12, wherein the carrier comprises on its end facing away from the beam splitter a coupling onto which various microscope accessories can be mounted.
 15. The stereo microscope as defined in Claim 14, wherein the carrier is insertable into the recess of the microscope rotated 180 degrees about an axis perpendicular to the beam path, so that the beam splitter are used for reflecting in and reflecting out.
 16. The stereo microscope as defined in Claim 14, wherein different microscope accessories are inserted into the first and second beam path.
 17. The stereo microscope as defined in Claim 12, wherein the stereo microscope is a surgical microscope.
 18. The stereo microscope as defined in Claim 12, wherein when no beam splitter is inserted into the beam path of the stereo microscope, there is

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inserted into the respective recess a plane-parallel plate, held on a carrier, whose optical path length corresponds to that of the beam splitter.

19. The stereo microscope as defined in Claim 1, wherein the beam splitter has a optical property of being intensity-specific, wavelength-specific or polarization state-specific.
20. The stereo microscope as defined in Claim 19, wherein the beam splitter or splitters are splitter prisms (2', 3).
21. The stereo microscope as defined in Claim 12, wherein further optical components are mounted on the carrier.
22. The stereo microscope as defined in Claim 21, wherein the further optical components comprise filters and compensation elements.
23. The stereo microscope as defined in Claim 12, wherein the carriers comprise a coding that transmits to a control unit information about the stereo microscope accessory optically connected to the beam path.
24. The stereo microscope as defined in Claim 23, wherein the control unit performs an adaptation of the stereo microscope on the basis of the coding.

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